

from Applicants. However, the Examiner did not include an initialed copy of the associated Form PTO-1449, along with Paper No. 10. Applicants respectfully request that the Examiner forward an initialed copy of the Form PTO-1449, to Applicants' undersigned representative, along with the next Official Communication from the Examiner.

In Paper No. 10, the Examiner maintains her rejection of claims 17-25 under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, the Examiner contends that "enhancing", as recited in claims 17 and 25, is a relative term. The Examiner insists that the "rejection [on this basis] is proper as the metes and bounds of the scope of the claims are unclear." (Paper No. 10, p. 2). In Paper No. 10, the Examiner argues, in response to Applicants' arguments set forth in the Request for Reconsideration filed on January 16, 2002, that comparison of the moisturizing properties of an "enhanced" composition with those of the original composition is of no benefit in terms of providing clarity. In this regard, the Examiner argues that, "the 'original moisturizing properties' of comparison formulations cannot be read into the instant claims." (*Id.*). Applicants disagree and respectfully traverse the Examiner's rejection and her arguments in support thereof for the following reasons.

Applicants again submit that claims 17-25 are not indefinite. To begin with, there is no need, as suggested by the Examiner, to read "the original moisturizing properties" of comparison formulations into the rejected claims. Claims 17-25 concern only "a composition", and reference no "comparison formulation".

Quite simply, claims 17-25 are directed to methods. These methods each comprise three active steps: (a) providing a composition comprising at least one cosmetic or pharmaceutical active substance; (b) providing a cyclic carbonate of the general formula (I); and (c) combining the composition and the cyclic carbonate. No comparison is required in any of the steps recited in the claims. The preambles of claims 17 and 25 indicate that the methods enhance the moisturizing properties of the composition, "the composition" being introduced in step (a) of the claims.

Applicants' arguments set forth in the Request for Reconsideration filed on January 16, 2002, attempted to highlight this basis for "comparison". The claimed method "enhances" or improves the moisturizing properties of the "composition comprising at least one

cosmetic or pharmaceutical active substance" by combining the composition with a cyclic carbonate of the general formula (I). The only comparison necessary for understanding the rejected claims is that the moisturizing properties of the composition after combination with the cyclic carbonate be improved or "enhanced" compared to the moisturizing properties of the composition prior to combination with the cyclic carbonate. The original composition, and all of its inherent properties, are already recited in the rejected claims, and thus nothing is required to be read into the claims.

Applicants again respectfully submit that one of ordinary skill in the art would be reasonably apprised of the metes and bounds of the claims, particularly when the claims are read in light of the Specification. It is clear that the moisturizing properties are "enhanced" relative to the originally provided preparation with which the cyclic carbonate is combined. Moreover, one of ordinary skill in the art would recognize such properties and understand the mechanisms by which such properties may be evaluated, particularly in light of the Specification. (*See, e.g.*, Applicants' Spec., pp. 17-18). Regardless of whether the term "enhancing" is relative, as it is used in the preamble of the rejected claims, which Applicants submit it is not, the claim language is still definite. The fact that a term is relative does not automatically render the language indefinite. Comparative language has been deemed to be acceptable where either a standard is provided, or where one of ordinary skill in the art would understand the degree in light of the Specification. (*See, e.g.*, M.P.E.P. §2173.05(b)). In this case the moisturizing properties are "better than", or in other words, "enhanced" in comparison to the original moisturizing properties. The original moisturizing properties of the composition which is positively recited in the rejected claims provide a standard for "enhancement".

Thus, Applicants respectfully submit that claims 17-25 are not indefinite and withdrawal of the rejection under 35 U.S.C. §112, second paragraph, is respectfully requested.

In Paper No. 10, the Examiner rejects claims 7-9, 13 and 15 under 35 U.S.C. §102(a) and (c), as being anticipated by U.S. Pat. No. 5,993,787 of Sun, *et al.* (hereinafter referred to as "Sun"). Specifically, the Examiner contends that Sun discloses a cosmetic composition containing propylene carbonate and at least one cosmetic agent, such as glycerol, citing the Abstract and column 10 of the reference. The Examiner also contends that glycerol is

conventionally used in hair care compositions, and thus argues that claim 15 is anticipated. The Examiner cites Flick, E.W., Cosmetic and Toiletry Formulations, Vol. 7, p.186 (Second Ed., Norwich, New York 1999) in support of this "convention". Additionally, the Examiner contends that the claims are not directed to a method of using a cyclic carbonate to moisturize a substrate. The Examiner argues that the claims are actually directed to a method of using a composition comprising a cyclic carbonate and at least one other cosmetic component to moisturize a substrate. The Examiner argues that the "alleged newly discovered moisturizing effect resulting from topically applying the cosmetic composition shown in Sun, . . . [is] deemed inherent." (Paper No. 10, p. 4).

Applicants respectfully traverse the Examiner's rejection and the arguments and contentions in support thereof for the following reasons.

The rejected claims are not directed to the topical application of "the cosmetic composition shown in Sun". Applicants' claimed method comprises contacting a substrate to be moisturized with a cosmetic or pharmaceutical composition comprising a cyclic carbonate of the general formula (I). The cosmetic or pharmaceutical compositions in accordance with Applicants' claimed method contain water and water-miscible components, normally emulsified with the oil components via an emulsifier, and at the very least are not "anhydrous". (See, e.g., Applicants' Specification, pp. 3-5 and the Examples).

In contrast, Sun teaches "[e]ntirely anhydrous" topical preparations. (See, Sun abstract). It is disclosed that Sun's taught compositions are entirely anhydrous as they contain propylene carbonate. Sun references the drawbacks associated with aqueous compositions containing propylene carbonate in the Background portion of the reference. (See, Sun, col. 1, lines 43-48). Sun desires to incorporate propylene carbonate, and in turn, recognizes the accompanying need to exclude water.

Suitable cyclic carbonates for use in Applicants' claimed method do not include propylene carbonate, as it has noted formulational drawbacks in aqueous compositions. Examples of suitable cyclic carbonates for use in Applicants' claimed method are listed in the Specification at pages 2 and 3.

Accordingly, since the claimed method does not employ the composition taught by Sun, the claims are not anticipated. Reconsideration and withdrawal of the rejection based upon the Sun reference are respectfully requested.

In Paper No. 10, the Examiner also rejects claims 7-10, 13 and 15 under 35 U.S.C. §102(a) and (e), as being anticipated by U.S. Pat. No. 6,299,889 of Cowton, *et al.* (hereinafter referred to as "Cowton"). The Examiner contends that Cowton teaches a cosmetic composition containing propylene carbonate and other conventional additives such as glycerin, propylene glycol and fragrance.

Applicants respectfully traverse the Examiner's rejection and the arguments and contentions in support thereof for the following reasons.

Once again, the compositions taught by Cowton contain little, if any, water. Thus, propylene carbonate is an acceptable solvent for use in the ascorbic acid compositions taught therein. Cowton recognizes the need to exclude water from the taught compositions since ascorbic acid is readily oxidized in aqueous environments. (*See*, Cowton, col. 1, lines 37-44). As discussed above, Applicants' claimed method does not employ a cosmetic composition containing propylene carbonate.

Accordingly, since the claimed method does not employ the composition taught by Cowton, the claims are not anticipated. Reconsideration and withdrawal of the rejection based upon the Cowton reference are respectfully requested.

In Paper No. 10, the Examiner rejects claims 7-10, 13-15 and 17-24 under 35 U.S.C. §103(a), as being unpatentable over U.S. Pat. No. 5,540,853 of Trinh, *et al.* (hereinafter referred to as "Trinh"). The Examiner contends that Trinh discloses skin and hair care compositions comprising a liquid carrier, and that propylene carbonate is a disclosed carrier for hair care compositions. The Examiner also contends that Trinh discloses the further inclusion of humectants, moisturizers and/or emollients for moisturizing benefit in the compositions.

Applicants respectfully traverse the Examiner's rejection and the arguments and contentions in support thereof for the following reasons.

It is well-settled that in order to establish a *prima facie* case of obviousness based upon a single reference, and thus shift the burden of proving non-obviousness onto Applicants,

each of the following three criteria must be satisfied: (1) the reference must contain a teaching or suggestion which would motivate one of ordinary skill in the art to modify the reference as suggested by the Examiner (it is not sufficient to say that the reference can be combined without a teaching in the cited reference to suggest the desirability of such a modification); (2) there must be a reasonable expectation of success; and (3) the reference must teach or suggest each and every element of Applicant's claimed invention. (M.P.E.P. §2143).

Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness. As discussed above, Applicants' claimed method is directed to the use of compositions containing cyclic carbonates suitable for aqueous compositions. Trinh mentions propylene carbonate as a possible carrier component for certain hair formulations. However, not one of the 83 examples set forth in Trinh teaches the use of propylene carbonate in an aqueous cosmetic composition. In fact, all that Trinh discloses is that propylene carbonate can be used to dissolve certain copolymer components which might be utilized in certain hair care formulations. Nowhere does Trinh suggest combining a cyclic carbonate, as claimed, with a cosmetic composition, as claimed, for moisturizing a substrate, as claimed.

Accordingly, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness, as the three criteria necessary to establish a *prima facie* case of obviousness have not been satisfied. Thus, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §103(a), based solely upon the Trinh reference.

In Paper No. 10, the Examiner rejects claims 7-12, 15 and 17-24 under 35 U.S.C. §103(a), as being unpatentable over U.S. Pat. No. 4,801,331 of Murase (hereinafter referred to as "Murase"). The Examiner contends that Murase discloses a nail lacquer remover which contains 30-65% by weight of solvents such as propylene carbonate and glycerin carbonate. The Examiner also contends that Murase discloses an advantage of such solvents in that they do not extract oils and moisture from the nails as prior art solvents do, and that the carbonates have a high degree of wettability, thus precluding the need for additional surfactants. The Examiner argues that based upon the high level of wettability, one of ordinary skill in the art would have expected the compositions to have moisturizing properties.

Applicants respectfully traverse the Examiner's rejection and the arguments and contentions in support thereof for the following reasons.

First, Applicants submit that a high level of wettability does not signify moisturizing effect. Wettability indicates the ability of a compound to be coated by water. It is indicative of the surface energy of the compound, *i.e.*, how easily can water spread over the surface of the compound. A component which is wettable is not necessarily a skin and hair moisturizer. Applicants respectfully traverse the Examiner's statement that based upon the high level of wettability, one of ordinary skill in the art would have expected the compositions to have moisturizing properties, and request that the Examiner provide a basis in fact or technical reasoning supported by affidavit or cited references which equate wettability with moisturizing properties.

Second, there is no teaching or suggestion in Murase which would motivate one of ordinary skill in the art to include a cyclic carbonate in a cosmetic composition for contact with a substrate to be moisturized. As discussed above, the wettability of the carbonates does not suggest moisturizing properties. Moreover, the carbonates and the 1,3-dimethyl-2-imidazolidinone ("DMI"), another required component of the Murase compositions, are specifically taught to dissolve nitrocellulose present in nail lacquers. They are suggested for use because they extract less moisture from the nails than prior art solvents, as noted by the Examiner. However, this hardly equates to a suggestion that such carbonates be added to cosmetic compositions for moisturizing the skin and hair.

Thus, Murase fails to teach a method of contacting a substrate to be moisturized with a cosmetic formulation comprising a cyclic carbonate. Furthermore, there is no teaching or suggestion which would motivate one of ordinary skill in the art to modify the teachings of Murase to arrive at a method of moisturizing a substrate by contact with a cyclic carbonate-containing composition. Absent any such teaching or suggestion for modification, one of ordinary skill in the art cannot be reasonably expected to have an expectation of success in achieving Applicants' claimed invention.

Accordingly, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness, as the three criteria necessary to establish a *prima facie* case of

obviousness have not been satisfied. Thus, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §103(a), based solely upon the Murase reference.

In Paper No. 10, the examiner rejects claims 13, 14, 16 and 25 under 35 U.S.C. §103(a), as being unpatentable over Trinh, in view of Murase. Specifically, the Examiner contends that Trinh teaches the claimed invention, but acknowledges that Trinh fails to teach glycerin carbonate. However, the Examiner contends that Murase teaches the wettability of glycerin carbonate, and thus, the Examiner argues that one of ordinary skill in the art would have been motivated to replace the solvents of the hair care formulations taught by Trinh, with the glycerin carbonate of Murase because of the wettability of the carbonates.

Applicants respectfully traverse the Examiner's rejection and the arguments and contentions in support thereof for the following reasons.

First, the hair care compositions of Trinh may already contain propylene carbonate, which as Murase indicates also has "wettability". There is no indication in Murase that glycerin carbonate is more desirable than propylene carbonate, nor is there any indication in the teachings of Trinh that the carbonate should be replaced by other carbonates. Second, as discussed above, the wettability of the carbonates has no relation to moisturizing effects, nor the ability of the carbonates to enhance moisturizing effects. Accordingly, one of ordinary skill in the art would find no motivation in the teachings of either reference to make the combination suggested by the Examiner.

Accordingly, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness, as the three criteria necessary to establish a *prima facie* case of obviousness have not been satisfied. Thus, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §103(a), based upon the combined Trinh and Murase references.

Finally, even if it were assumed, for argument's sake, that the claimed invention could be shown to be *prima facie* obvious based upon the cited references, which it has not been, any such *prima facie* obviousness would be overcome by Applicants' showing of significantly improved results with respect to moisturizing effect and longevity of such effects.

As shown by the examples presented in Applicants' Specification, cosmetic compositions containing a cyclic carbonate in accordance with the claimed invention (Examples

1 and 2) provide higher moisture levels when applied to the skin than formulations not containing the cyclic carbonate (Comparative Examples C1 - C4). Moreover, as also shown in Table 2, the improved moisturization associated with the compositions containing the cyclic carbonate endures significantly longer than the moisturization provided by formulations lacking the cyclic carbonate. As set forth in the Specification, at page 2, lines 6-18, these significant improvements are unexpected.

Applicants submit that the significantly improved results, along with Applicants' statement that such improved results are unexpected, satisfy the required burden under Section 716.02(b) of the M.P.E.P. and *In re Soni*, 34 USPQ.2d 1684, 1687 (Fed. Cir. 1995), absent evidence to the contrary. It is submitted that Applicants' showing of significantly improved results sufficiently rebuts any alleged *prima facie* case of obviousness.

In view of the remarks set forth above, Applicants submit that all pending claims patentably distinguish over the prior art of record and known to Applicants, either alone or in combination. Accordingly, reconsideration, withdrawal of the rejections and a Notice of Allowance for all pending claims are respectfully requested.

Respectfully submitted,

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July 24, 2002
(Date)

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